AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A compound of the formula I,

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in which

A)

R1 to R4 are H;

X is S, SO, SO_2 ;

Y is $(CH_2)_p$, where p is 0, 1, 2 or 3;

is CF₃, (C₂-C₁₈)-alkyl, (C₃-C₄)-cycloalkyl, (C₆-C₈)-cycloalkyl, wherein the alkyl or cycloalkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

 $(CH_2)_r$ -COR6, where r is 1-6 and R6 is OH, O-(C₁-C₆)-alkyl or NH₂;

CH₂-CH(NHR7)-COR8, where R7 is H, C(O)-(C₁-C₄)-alkyl or C(O)O-(C₁-C₄)-alkyl and R8 is OH, O-(C₁-C₆)-alkyl or NH₂;

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phenyl, 1- or 2-naphthyl, <u>or</u> biphenyl or a heterocyclic radical, where the rings or ring systems are substituted one or two times by <u>F, Cl, Br, I, CN, O(C1-C8)-alkyl, O(C3-C8)-cycloalkyl, O-CO-(C1-C8)-alkyl, O-CO-(C3-C8)-cycloalkyl, S(O)0-2(C1-C8)-alkyl, S(O)0-2(C3-C8)-cycloalkyl, NH2, NH-(C1-C8)-alkyl, NH-(C3-C8)-cycloalkyl, N[(C1-C8)-alkyl]2, N[(C3-C8)-cycloalkyl]2, NH-CO-(C2-C8)-alkyl, NH-CO-(C3-C8)-cycloalkyl, SO3H, SO2-NH2, SO2-NH-(C1-C8)-alkyl, SO2-NH-(C3-C8)-cycloalkyl, NH-SO2-NH2, NH-SO2-(C1-C8)-alkyl, NH-SO2-(C3-C8)-cycloalkyl, O-CH2-COOH, O-CH2-CO-O(C1-C8)-alkyl, CO-N(C1-C8)-alkyl, CO-O-(C3-C8)-cycloalkyl, CO-NH2, CO-NH(C1-C8)-alkyl, CO-N[(C1-C8)-alkyl, CO-O-(C3-C8)-cycloalkyl, CO-NH2, CO-NH(C1-C8)-alkyl, CO-N[(C1-C8)-alkyl]2, (C1-C8)-alkyl, or (C3-C8)-cycloalkyl, wherein the alkyl or cycloalkyl groups in each case have zero to seven hydrogen atoms independently replaced by fluorine, or <u>F, Cl, Br, I, or CN</u>;</u>

with the proviso that R5 is not unsubstituted phenyl, 4-fluorophenyl, 4-bromophenyl, 4-chlorophenyl, 3-methylphenyl, 4-methylphenyl, 4-methoxyphenyl, 4-n-butylphenyl, 4-t-butylphenyl, 2-aminophenyl, 2-nitrophenyl or C₁₂-alkyl;

or

B)

I

R1, R4 independently of one another are

H, F, Cl, Br, I, CN, N₃, NO₂, OH, O(C₁-C₈)-alkyl, O(C₃-C₄ and C₆-C₈)-cycloalkyl, O-CH₂-phenyl, O-phenyl, O-CO-(C₁-C₈)-alkyl, O-CO-(C₃-C₈)-cycloalkyl, S(O)₀₋₂(C₁-C₈)-alkyl, S(O)₀₋₂(C₃-C₈)-cycloalkyl, NH₋(C₁-C₈)-alkyl, NH₋(C₃-C₈)-cycloalkyl, NH₋(C₃-C₈

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 (C_1-C_8) -alkyl, (C_3-C_8) -cycloalkyl, (C_2-C_8) -alkenyl, or (C_2-C_8) -alkynyl, where in the alkyl, cycloalkyl, alkenyl and alkynyl groups in each case have zero to seven hydrogen atoms replaced by fluorine,

or one hydrogen replaced by OH, OC(O)CH₃, O-CH₂-Ph, NH₂, NH-CO-CH₃ or N(COOCH₂Ph)₂; or

phenyl, or 1- or 2-naphthyl,

5-tetrazolyl, 1-[(C_4 - C_6)-alkyl]-5-tetrazolyl, 2-[(C_4 - C_6)-alkyl]-5-tetrazolyl;

1-imidazolyl;

1- or 4-[1,2,4]-triazolyl,

2- or 3-thienyl,

2- or 3-furyl,

2-, 3- or 4-pyridyl,

2-, 4- or 5-oxazolyl,

3-, 4- or 5-isoxazolyl,

2-, 4- or 5-thiazolyl, or

3-, 4- or 5-isothiazolyl

where in each case the aryl radical or heterocycle is unsubstituted or substituted one or two times by

F, Cl, Br, CN,

OH, (C_1-C_4) -alkyl, CF_3 , $O-(C_1-C_4)$ -alkyl,

 $S(O)_{0.2}(C_1-C_6)$ -alkyl, NH₂, NH-SO₂-(C₁-C₄)-alkyl, COOH, CO-O-(C₁-C₄)-alkyl or CO-NH₂ and in the alkyl groups one to seven hydrogen atoms may be replaced by fluorine;

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R2, R3 independently of one another are

H, F, Cl, Br, I, CN, N₃, NO₂, O(C₁-C₈)-alkyl, O(C₃-C₈)-cycloalkyl, O-CO-(C₁-C₈)-alkyl, O-CO-(C₃-C₈)-cycloalkyl, S(O)₀₋₂(C₁-C₈)-alkyl, S(O)₀₋₂(C₃-C₈)-cycloalkyl, NH₂, NH-(C₁-C₈)-alkyl, NH-(C₃-C₈)-cycloalkyl, N[(C₁-C₈)-alkyl]₂, N[(C₃-C₈)-cycloalkyl]₂, NH-CO-(C₁-C₈)-alkyl, NH-CO-(C₃-C₈)-cycloalkyl, SO₃H, SO₂-NH₂, SO₂-NH-(C₅-C₈)-alkyl, SO₂-NH-(C₃-C₈)-cycloalkyl, NH-SO₂-(C₁-C₈)-alkyl, NH-SO₂-(C₅-C₈)-cycloalkyl; O-CH₂-COOH, O-CH₂-CO-O(C₁-C₈)-alkyl, COOH, CO-O(C₁-C₈)-alkyl, CO-O-(C₃-C₈)-cycloalkyl, CO-NH(C₁-C₈)-alkyl, CO-N[(C₁-C₈)-alkyl]₂, (C₁-C₈)-alkyl, (C₃-C₈)-cycloalkyl, (C₂-C₈)-alkenyl, or (C₂-C₈)-alkynyl, where in the alkyl, cycloalkyl, alkenyl and alkynyl groups in each case have zero to seven hydrogen atoms replaced by fluorine, or one hydrogen replaced by OH, OC(O)CH₃, O-CH₂-Ph, NH₂, NH-CO-CH₃ or N(COOCH₂Ph)₂; or

phenyl, or 1- or 2-naphthyl,
5-tetrazolyl,
1-[(C₁-C₆)-alkyl]-5-tetrazolyl,
2-[(C₁-C₆)-alkyl]-5-tetrazolyl;
1-imidazolyl;
1- or 4-[1,2,4]-triazolyl,
2- or 3-thienyl,
2- or 3-furyl,
2-, 3- or 4-pyridyl,
2-, 4- or 5-oxazolyl,
3-, 4- or 5-isoxazolyl,
2-, 4- or 5-thiazolyl,

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3-, 4- or 5-isothiazolyl

where the heterocycle is unsubstituted or substituted one or two times by F, Cl, Br, CN, OH, (C_1 - C_4) alkyl, CF₃, O-(C_1 - C_4)-alkyl, S(O)₀₋₂(C_1 - C_6)-alkyl, NH₂, NH-SO₂-(C_1 - C_4)-alkyl, COOH, CO-O-(C_1 - C_4)-alkyl or CO-NH₂-and-wherein in the alkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

or R2 and R3 together form the group –O-CH₂-O-; where in each case at least one of the radicals R1, R2, R3 and R4 is different from hydrogen;

X is S, SO, SO_2 ;

ij

Y is $(CH_2)_p$, where p can be is 0, 1, 2 or 3;

is (C₁-C₁₈)-alkyl or (C₃-C₄- and C₆-C₈)-cycloalkyl, wherein the alkyl and cycloalkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

 $(CH_2)_r$ -COR6, where r is 1-6 and R6 is OH, O- $(C_1$ -C₆)-alkyl or NH₂;

CH₂-CH(NHR7)-COR8, where R7 is H, C(O)-(C₁-C₆)-alkyl or C(O)O-(C₁-C₆)-alkyl and R8 is OH, O-(C₁-C₆)-alkyl or NH₂;

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alkyl, NH-(C₃-C₈)-cycloalkyl, N[(C₁-C₈)-alkyl]₂, N[(C₃-C₈)-cycloalkyl]₂, NH-CO-(C₂-C₈)-alkyl, NH-CO-(C₃-C₈)-cycloalkyl, SO₃H, SO₂-NH₂, SO₂-NH-(C₁-C₈)-alkyl, SO₂-NH-(C₃-C₈)-cycloalkyl, NH-SO₂-NH₂, NH-SO₂-(C₁-C₈)-alkyl, NH-SO₂-(C₃-C₈)-cycloalkyl, O-CH₂-COOH, O-CH₂-CO-O(C₁-C₈)-alkyl, COOH, CO-O(C₁-C₈)-alkyl, CO-O-(C₃-C₈)-cycloalkyl, CO-NH₂, CO-NH(C₁-C₈)-alkyl, CO-N[(C₁-C₈)-alkyl]₂, (C₁-C₈)-alkyl, or (C₃-C₈)-cycloalkyl, where in the alkyl or cycloalkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine; or F. Cl. Br. I. or CN;

or a physiologically tolerable salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

- 2. (Currently Amended) The compound as claimed in claim 1, in which
- R1, R4 independently of one another are

H, F, Cl, Br, I, CN, N₃, NO₂, OH, O(C₁-C₈)-alkyl, O(C₃-C₄ and C₆-C₈)-cycloalkyl, O-CH₂-phenyl, O-phenyl, O-CO-(C₁-C₈)-alkyl, O-CO-(C₃-C₈)-cycloalkyl, S(O)₀₋₂(C₁-C₈)-alkyl, S(O)₀₋₂(C₃-C₈)-cycloalkyl, NH₂, NH-(C₁-C₈)-alkyl, NH-(C₃-C₈)-cycloalkyl, N[(C₁-C₈)-alkyl]₂, N[(C₃-C₈)-cycloalkyl]₂, NH-CO-(C₁-C₈)-alkyl, NH-CO-(C₃-C₈)-cycloalkyl, SO₃H, SO₂-NH₂, SO₂-NH-(C₁-C₈)-alkyl, SO₂-NH-(C₃-C₈)-cycloalkyl, NH-SO₂-NH₂, NH-SO₂-(C₁-C₈)-alkyl, NH-SO₂-(C₃-C₈)-cycloalkyl, O-CH₂-COOH, O-CH₂-CO-O(C₁-C₈)-alkyl, COOH, CO-O(C₁-C₈)-alkyl, CO-O-(C₃-C₈)-cycloalkyl, CO-NH₂, CO-NH(C₁-C₈)-alkyl, CO-N[(C₁-C₈)-alkyl]₂, (C₁-C₈)-alkyl, (C₃-C₈)-cycloalkyl, (C₂-C₈)-alkyl, or (C₂-C₈)-alkynyl, wherein the alkyl, cycloalkyl, alkenyl and alkynyl groups in each case have zero to seven hydrogen atoms replaced by

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fluorine, or one hydrogen replaced by OH, OC(O)CH₃, O-CH₂-Ph, NH₂, NH-CO-CH₃ or N(COOCH₂Ph)₂; or

phenyl, or 1- or 2-naphthyl,

 $5-tetrazolyl,\ 1-[(C_4-C_6)-alkyl]-5-tetrazolyl,\ 2-[(C_4-C_6)-alkyl]-5-tetrazolyl;$

1-imidazolyl;

1-or 4-[1,2,4]-triazolyl,

2-or-3-thienyl,

2-or 3-furyl,

2-, 3- or 4-pyridyl,

2-, 4- or 5-oxazolyl,

3-, 4- or 5-isoxazolyl,

2-, 4- or 5-thiazolyl,

3-, 4- or 5-isothiazolyl

where in each case the aryl radical or heterocycle is unsubstituted or substituted one or two times by

F, Cl, Br, CN,

OH, (C_1-C_4) -alkyl, CF_3 , $O-(C_1-C_4)$ -alkyl,

 $S(O)_{0-2}(C_1-C_6)$ -alkyl, NH_2 , $NH-SO_2-(C_1-C_4)$ -alkyl,

COOH, CO-O-(C₁-C₄)-alkyl, CO-NH₂ and wherein in the alkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

R2, R3 independently of one another are

H, F, Cl, Br, I, CN, N₃, NO₂, O(C₁-C₈)-alkyl, O(C₃-C₈)-cycloalkyl, O-CO-(C₁-C₈)-alkyl, O-CO-(C₃-C₈)-cycloalkyl, S(O)₀₋₂(C₁-C₈)-alkyl, S(O)₀₋₂(C₃-C₈)-cycloalkyl, NH₂, NH-(C₁-C₈)-alkyl, NH-(C₃-C₈)-cycloalkyl, N[(C₁-C₈)-alkyl]₂, N[(C₃-C₈)-cycloalkyl]₂, NH-CO-(C₁-C₈)-alkyl, NH-CO-(C₃-C₈)-cycloalkyl,

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SO₃H, SO₂-NH₂, SO₂-NH-(C₅-C₈)-alkyl, SO₂-NH-(C₃-C₈)-cycloalkyl, NH-SO₂-NH₂, NH-SO₂-(C₁-C₈)-alkyl, NH-SO₂-(C₅-C₈)-cycloalkyl, O-CH₂-COOH, O-CH₂-CO-O(C₁-C₈)-alkyl, COOH, CO-O(C₁-C₈)-alkyl, CO-O-(C₃-C₈)-cycloalkyl, CO-NH₂, CO-NH(C₁-C₈)-alkyl, CO-N[(C₁-C₈)-alkyl]₂, (C₁-C₈)-alkyl, (C₃-C₈)-cycloalkyl, (C₂-C₈)-alkenyl, or (C₂-C₈)-alkynyl, where in the alkyl, alkenyl cycloalkyl and alkynyl groups in each case have zero to seven hydrogen atoms replaced by fluorine, or one hydrogen replaced by OH, OC(O)CH₃, O-CH₂-Ph, NH₂, NH-CO-CH₃ or N(COOCH₂Ph)₂; or

phenyl, or 1- or 2-naphthyl,
5-tetrazolyl,
1-{(C₁-C₆)-alkyl]-5-tetrazolyl,
2-{(C₁-C₆)-alkyl]-5-tetrazolyl;
1-imidazolyl;
1- or 4-{1,2,4}-triazolyl,
2- or 3-thienyl,
2- or 3-furyl,
2-, 3- or 4-pyridyl,
2-, 4- or 5-isoxazolyl,
3-, 4- or 5-isothiazolyl
where the heterocycle may be su

where the heterocycle may be substituted up to two times by

F, Cl, Br, CN, OH, (C₁-C₄)-alkyl, CF₃, O-(C₁-C₄)-alkyl,

 $S(O)_{0-2}(C_1-C_6)$ -alkyl, NH_2 , $NH-SO_2$ - (C_1-C_4) -alkyl;

COOH, CO-O-(C₁-C₄)-alkyl, CO-NH₂-wherein the alkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

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or R2 and R3 together form the group –O-CH₂-O-; where in each case at least one of the radicals R1, R2, R3 and R4 is different from hydrogen;

- X is S_{7} , SO_{7} , SO_{2} ;
- Y is $(CH_2)_p$, where p can be is 0, 1, 2 or 3;
- R5 is (C₁-C₁₈)-alkyl or (C₃-C₄- and C₆-C₈)-cycloalkyl, wherein the alkyl or cycloalkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

 $(CH_2)_r$ -COR6, where r is 1-6 and R6 is OH, O- $(C_1$ -C₆)-alkyl or NH₂;

CH₂-CH(NHR7)-COR8, where R7 is H, C(O)-(C₁-C₆)-alkyl or C(O)O-(C₁-C₆)-alkyl where R8 is OH, O-(C₁-C₆)-alkyl or NH₂;

phenyl, 1- or 2-naphthyl, <u>or</u> biphenyl or a heterocyclic radical, where the rings or ring systems can be substituted up to two times by <u>F, Cl, Br, I, CN, O(C₁-C₈)-alkyl, O(C₃-C₈)-cycloalkyl, O-CO-(C₁-C₈)-alkyl, O-CO-(C₃-C₈)-cycloalkyl, NH₂, NH-(C₁-C₈)-alkyl, NH-(C₃-C₈)-cycloalkyl, N[(C₁-C₈)-alkyl]₂, N[(C₃-C₈)-cycloalkyl]₂, NH-CO-(C₂-C₈)-alkyl, NH-CO-(C₃-C₈)-cycloalkyl; SO₃H; SO₂-NH₂, SO₂-NH-(C₁-C₈)-alkyl, SO₂-NH-(C₃-C₈)-cycloalkyl; NH-SO₂-NH₂; NH-SO₂-(C₁-C₈)-alkyl, NH-SO₂-(C₃-C₈)-cycloalkyl; O-CH₂-COOH, O-CH₂-CO-O(C₁-C₈)-alkyl, COOH, CO-O(C₁-C₈)-alkyl, CO-O-(C₃-C₈)-cycloalkyl, CO-NH₂, CO-NH(C₁-C₈)-alkyl, CO-N[(C₁-C₈)-alkyl]₂; (C₁-C₈)-alkyl, or (C₃-C₈)-cycloalkyl, wherein</u>

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the alkyl or cycloalkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine; or F, Cl, Br, I, or CN;

or a physiologically tolerable salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

- 3. (Currently Amended) The compound as claimed in claim 1, in which
- R1, R4 independently of one another are H, F, Cl, or Br;
- R2, R3 independently of one another are H, F, Cl, Br, CN,CONH₂, NH-SO₂-(C₁-C₈)-alkyl, O-(C₁-C₈)-alkyl, COOH, (C₁-C₈)-alkyl, (C₁-C₈)-alkenyl, (C₁-C₈)-alkynyl, wherein the alkyl, alkenyl and alkynyl groups in each case have zero to seven hydrogen atoms replaced by fluorine; or

phenyl, or 1-imidazolyl; where the rings may be substituted up to two times by

F, Cl, Br, CN, OH, (C_1-C_4) -alkyl, CF_3 , O- (C_1-C_4) -alkyl, wherein the alkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

where in each case at least one of the radicals R1, R2, R3 and R4 is different from hydrogen;

X is S_{1} , SO_{2} ;

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Y is $(CH_2)_p$, where p can be is 0 or 1;

is (C₁-C₁₈)-alkyl or (C₃-C₄- and C₆-C₈)-cycloalkyl, where in the alkyl and cycloalkyl groups in each case have zero to seven hydrogen atoms replaced by fluorine;

(CH₂)_r-CO-O-(C₁-C₆)-alkyl, where r is 1-6;

CH₂-CH(NHR7)-COR8, where R7 is H, C(O)-(C₁-C₄)-alkyl or C(O)O-(C₁-C₄)-alkyl and R8 is OH, O-(C₁-C₆)-alkyl or NH₂;

phenyl, a heterocyclic radical;

or a physiologically tolerable salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

4. (Cancelled)

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5. (Original) The compound as claimed in claim 1, which

R1 is H,

R2 is CI,

R3 is H,

R4 is H,

R5 is CH₃,

X is S, and

Y is $(CH_2)_p$ where p is 0

or a physiologically tolerable salt thereof, in any stereoisomeric form, or a mixture of any such compounds in any ratio.

6. - 29. (Cancelled) 13

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